HANDOUTS FROM THE COMMUNITY MEETING OF FEBRUARY 23, 1993

02/23/1993

DOE-FN 26 HANDOUTS **PUBLIC**

UPCOMING PUBLIC PARTICIPATION ACTIVITIES

EVENT	DATE/TIME	PLACE	TOPIC
Public Comment Period on Five-Year Plan and Site Specific Plan	Opens: 1/31/93 Ends: 3/15/93	Documents can be reviewed at PEIC	Send comments to: Ken Morgan, DOE PIO P.O. Box 398705 Cinti., OH 45239
Community Meeting	Feb. 23, 1993 6:00 p.m.	Plantation, Dry Fork Rd Harrison, Ohio	Exhibits at 6:00 At regular meeting a FEMP update and status of cleanup. Followed by Question/Answer
FRESH	Feb. 25, 1993 7:30 p.m.	Venice Presbyterian Church in Ross	Monthly Site Report
OU2 Feasibility Study and Proposed Plan due to U.S. EPA	March 15, 1993		
Community Roundtable	March 23, 1993 7:00 p.m.	ERA Alpha Bldg. 10991 Ham Cleves Road	Risk Management

REMOVAL ACTIONS

Identified under the terms of the 1991 Amended Consent Agreement:

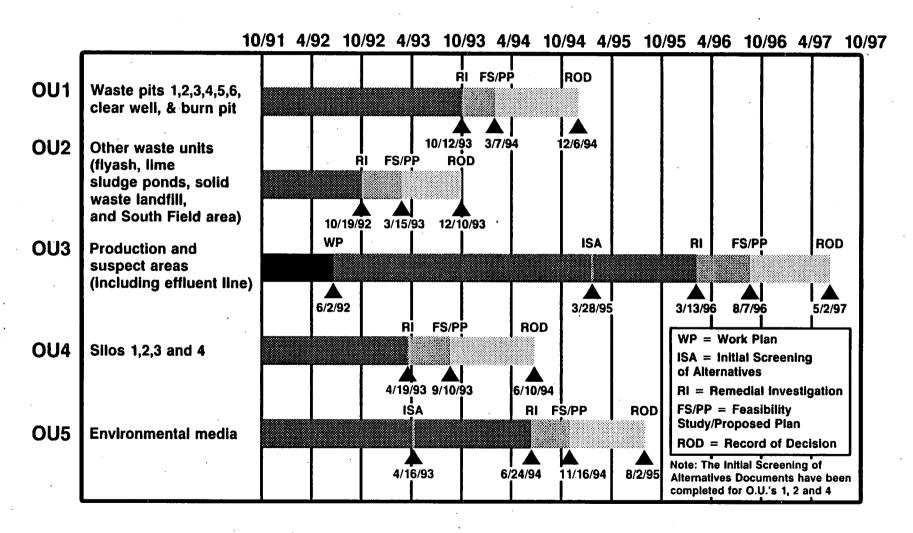
1)	Contaminated Water Beneath FEMP Buildings Ongoing
2)	Waste Pit Area Runoff Control
3)	South Groundwater Contamination Plume UC
4)	Silos 1 and 2
5)	K-65 Decant Sump Tank C
6)	Waste Pit 6 Residues
7)	Plant 1 Pad Continuing Release
8)	Inactive Flyash Pile Control
9)	Removal of Waste Inventories Ongoing
10)	Active Flyash Pile Controls
11)	Pit 5 Experimental Treatment Facility C
12)	Safe Shutdown
13)	Plant 1 Ore Silos UC
14)	Contaminated Soils Adjacent to Sewage Treatment Plant Incinerator
15)	Scrap Metal Piles
16)	Collect Uncontrolled Production Area Runoff (Northeast) UC
17)	Improved Storage of Soil and Debris UC
18)	Control Exposed Material in Pit 5
19)	Plant 7 Dismantling
20)	Stabilization of Uranyl Nitrate Inventories Ongoing
21)	Expedited Silo 3 Dust Collector
22)	Waste Pit Area Containment Improvement Workplan under review by EPAs
23)	Inactive Flyash Pile
24)	Pilot Plant Sump Workplan under review by EPAs
25)	Nitric Acid Tank Car and Area Workplan under review by EPAs
26)	Asbestos Removals (Asbestos Program)
27)	Management of Contaminated Structures at the FEMP EE/CA under development by DOE
28)	Contamination at the Fire Training Facility Workplan under development by DOE
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29) 30)			. Workplan under development by DOE . Workplan under development by DOE
	Under Design A = Engineering Evalu	UC = Under Construction ation/Cost Analysis	C = Completed

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FERNALD ENVIRONMENTAL MANAGEMENT PROJECT SCHEDULE OF RI/FS ACTIVITIES



COMMUNITY MEETING EVALUATION

Presen	<u>ntations</u>
1.	The information provided tonight was not too technical, making it easy to understand.
	() Yes
	() No
2.	If you had trouble understanding a topic or presentation, which one(s)?
3.	When I left the meeting tonight, I felt that all my questions and concerns had been addressed. () Yes () No
4.	What topics were not discussed to your satisfaction tonight?
Hando 1.	The written materials, such as fact sheets, gave additional detail about the
1.	information provided during the presentations.
	() Yes
	() No
2.	The acronym list and glossary provided tonight were helpful.
	() Yes
	() No
3.	I would like to have a copy of the overheads provided at the community meeting.
	() Yes
	() No
Exhib	
1.	Did you review the exhibits tonight? () Yes
	() No
	If no, why?
2.	If you did review the exhibits, did you find this information helpful in
	understanding the presentations?
	() Yes () No
	If not, why?

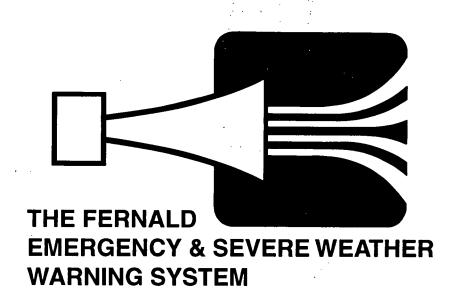
Newsletter

The Fernald Project Cleanup Report is issued about four times a year, to coincide with community meetings. At present, it is designed to highlight the information that will be discussed at the community meetings, and you receive it about one week before the meeting.

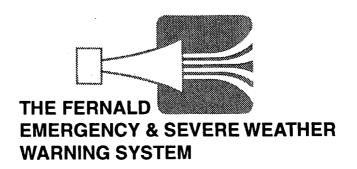
1.	 Which would you prefer: () The current arrangement () Receiving the Cleanup Report during the months when there aren't community meetings () Both, which would mean issuing the newsletter more than four times a year
2.	What type of information would you like to see in the newsletter?
3.	Was the information in the newsletter too technical? () Yes () No

Please use additional space if you have any specific suggestions to improve the meetings or if you would like to request additional information.

6







The Fernald Environmental Management Project has an emergency preparedness program for the Fernald site and surrounding area that works in coordination with state and local agencies. Warning sirens, one part of an Emergency Warning System at Fernald, will notify the community in case of an emergency.

The Fernald sirens will be activated for a general emergency at the Fernald site or for severe weather warnings. This bulletin explains what to do if you hear these warning sirens.

Discuss these procedures with your family so that everyone knows what to do in case of an emergency or a severe weather warning. Be sure to keep this bulletin in a place where you can find it easily.

The Fernald site is an environmental restoration project owned by the U.S. Department of Energy (DOE) and managed by Fernald **Environmental Restoration Management Corporation (FERMCO).** Even when uranium was processed on site, the primary emergency hazard at the plant was not from radiation-related sources, but from industrial chemicals stored and used on site. These chemicals have included ammonia, hydrofluoric acid. uranium hexafluoride, nitric acid, and sulfuric acid. Few of these chemicals remain onsite in any appreciable quantities. However, low-level radioactive waste materials, along with some thorium compounds, chlorine for water treatment, and quantities of Resource Conservation and Recovery Act (RCRA) regulated materials are still present at the site. Safe management of these materials is a major priority for Fernald personnel and management. A constant state of readiness is maintained for any incidents that could harm people or the environment.

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What does the warning system do?

Part of the emergency response capability at Fernald is the Emergency Warning System, a network of sirens to quickly warn people who are outdoors within the two mile Immediate Notification Zone of any site accident that might endanger people off-site. A Fernald emergency could include a chemical release, fire, or a similar situation that may affect people living near the plant.

The sirens also will provide a severe weather warning signal. Following the devastating tornadoes that struck Harrison, Ohio and Crosby Township on June 2, 1990, the DOE approved requests to use the Fernald Emergency Warning System for severe weather warnings.

The severe weather warning signal will be activated by the National Weather Service at Greater Cincinnati Airport as a part of the Hamilton County Civil Defense Outdoor Warning System. The entire 11-siren system located within a two-mile radius of the Fernald site will be activated, including the five sirens that cover portions of Ross and Morgan townships in Butler County.

In 1992, Hamilton County stopped activation of its system for severe thunderstorms except during a tornado watch. Six local governments asked the DOE to continue activating the siren system for all severe thunderstorms. The DOE also approved that request and worked out an agreement where the City of Harrison, Ohio can activate the system for warnings of severe thunderstorms and also provide earlier warnings for tornadoes. The City of Harrison is located on the Ohio-Indiana state line and gets its weather warning information from the National Weather Service in Indianapolis, Indiana, via Dearborn County, Indiana.

The new arrangements allows both Hamilton County and the City of Harrison, Ohio to activate the Severe Weather Warning System. Therefore, the sirens could be activated twice for the same storm.

The City of Harrison could activate for severe thunderstorms, tornado watches and tornado warnings. Hamilton County can activate for tornado watches and warnings.

There is no siren signal for all clear. All sirens indicate severe weather is in the area and residents should take cover and stay tuned to radio or TV.



What do the warning sirens sound like?

The Fernald warning sirens have two distinct warning signals:



An Emergency at the Fernald site

A "pulse-wail" sound alternating between a high and a low pitch would be used for a site accident that may impact people off-site



A Severe Weather Warning

The severe weather warning will sound one steady tone for about three minutes, the traditional civil defense warning used in several local communities.



When will the sirens be tested?

Both the Hamilton County Outdoor Siren Warning System and the Fernald Emergency Warning System are tested on the *first Wednesday of each month*. The Hamilton County steady tone will be tested at noon, followed by a test of the Fernald's pulsewail signal. Weekly testing of the Fernald Emergency Warning System with chimes has been discontinued.

IF THE SIRENS SOUND FOR A REAL EMERGENCY, NEARBY RESIDENTS SHOULD TAKE THE FOLLOWING ACTIONS:



Pre-select the safest place in your home or work place and know the quickest way to get there.

Go inside a building. It could be your home, your workplace, or some other nearby building.

Close the windows and doors and turn off all fans, heaters, furnaces, or air conditioners that draw air from the outside. Under certain conditions, a chemical release from Fernald may take the form of a gaseous cloud that could travel beyond the site boundary. For your safety, these precautions will help prevent chemicals from entering the building where you have taken shelter.

Turn on your radio or TV to an Emergency Broadcast station for public information messages that would be broadcast within a few minutes of any major emergency. Local stations which carry the Emergency Broadcast System are listed on the next page. Stay tuned until notified that the emergency has ended.

Keep pets indoors.

Please do not call the police, fire department, or local civil defense agencies. They will need to keep their phone lines clear for emergency phone calls. Limit your telephone use to essential calls to ensure that the lines are not overloaded.

All emergency instructions will be given on the Emergency Broadcast System. For your safety, do not leave your shelter unless directed or until you are told that it is safe to do so.

Local stations that carry the Emergency Broadcast System include:

WCKY 1530 AM WCPO-TV Channel 9 - Cincinnati WLW 700 AM WLWT-TV Channel 5 - Cincinnati WMOH 1450 AM - Hamilton WKRC-TV Channel 12 - Cincinnati



For a severe weather warning (a steady siren sound)

Turn your radio or TV to an Emergency Broadcast Station for public information messages. Local stations that carry the Emergency Broadcast System are listed above. Stay tuned until the severe weather condition has ended.

Be prepared to go to a safe place. In homes or other small buildings, go to the basement or a place in the middle of the house like a closet, bathroom, or interior hall that is on the lowest floor. Get under something sturdy.

Stay away from the windows, doors, and outside walls.

In school, be calm and follow the direction of your teacher. Stay away from auditoriums or gymnasiums with large roofs that could collapse easily.

In shopping centers or very large buildings, look for a pre-designated shelter. If there isn't one, the center part of the building on the lowest floor is the next best place to take shelter.

In mobile homes or cars, leave them and find shelter in a building. If there is no shelter nearby, lie flat in the nearest ditch, ravine, or culvert with your hands shielding your head.

Avoid standing in small, isolated sheds or other small structures in open areas.

A tree can act like a lightning rod. Avoid tall, isolated trees in open areas. Don't stand so you are above the surrounding land-scape (such as standing on a hilltop, in a field, on a beach or in a small boat). Stay away from open water.

Avoid the following: tractors and other metal farm equipment, motorcycles, golf carts, bicycles, golf clubs, wire fences, clotheslines, metal pipes, rails, or other metallic items that could attract lightning.

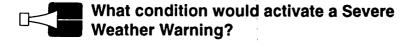
Do not telephone 911, the Hamilton or Butler County Communications Center, your local police, sheriff or fire department, or the Fernald site for weather information. These telephone lines are needed for immediate life-threatening emergencies.

Do not leave the building until you are told it is safe to do so.



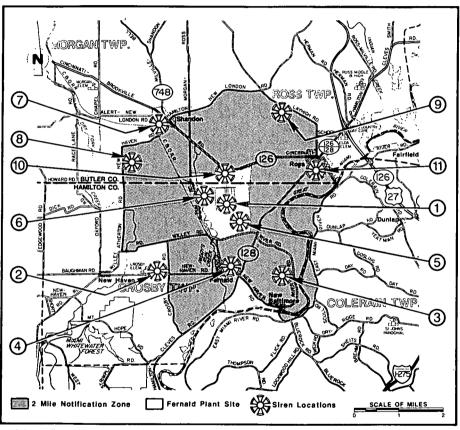
What kind of accident at Fernald would activate the sirens?

The only type of plant accident that would activate the sirens would be one that could affect the people living around the plant site. This type of occurrence is referred to as a General Emergency. A General Emergency could be declared as a precaution if an incident had actual or imminent off-site consequences. In such an event, the Emergency Warning System would be activated, and you would be given instructions on what to do through the Emergency Broadcast System.



If a severe thunderstorm or tornado warning is issued by the National Weather Service for any part of Hamilton County, the entire Hamilton County system, including the Fernald sirens, would be activated. The City of Harrison sirens, a separate system, would also be activated. In the event of a severe weather warning, you would be given instructions through the Emergency Broadcast System.

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT AREA MAP



A two mile notification zone has been established to designate the area that could be affected by an emergency at the Fernald site. The Fernald siren locations are:

- 1 Fernald Central
- 2 Crosby Elementary School
- 3 New Baltimore
- 4 Fernald
- 5 Fernald Southeast
- 6 Fernald West

- 7 Morgan Township Fire Dept.
- 8 New Haven Road
- 9 Layhigh Rd. at Windy Knoll Dr.
- 10 Fernald North
- 11 Ross Township Fire Dept.



What if my children are at school?

There is an Emergency Plan for school children in Butler and Hamilton counties.

In an emergency, schools in the area will be notified by tone alert radio receivers.

Parents should not pick up students at the schools unless they are so instructed by the Emergency Broadcast System.



Why is there an Emergency Plan at Fernald?

There are two main reasons for the Emergency Plan. One is to make sure that the Fernald Emergency Response Organization is prepared for an emergency. This includes operating Emergency Operations Centers, activating the Emergency Warning System, and taking protective measures for on-site and off-site safety. Another reason for the plan is to coordinate the responses between the Fernald site, DOE, Ohio Emergency Management Agency, and Butler and Hamilton County Emergency Management agencies.



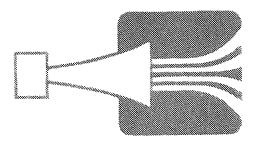
What roles do the counties and the state play in emergency operations?

The county Emergency Management office is responsible for coordinating emergency activities within each county. For the Fernald site, Butler and Hamilton counties will coordinate all emergency response operations at the local level and activate their respective Emergency Operations Centers for efficient decision-making. The Ohio Emergency Management Agency was created within the State of Ohio to coordinate local, state, and Federal

efforts in any disaster situation. The state, if requested, will provide additional assistance, such as environmental monitoring, health services, and traffic control.

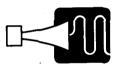
....For more information

If you have any questions about emergency planning, you may call the FERMCO Community Relations Department weekdays from 7:30 a.m. to 4:00 p.m. at (513) 738-6978 or 738-6644. You may also call the Butler County Emergency Management Agency (Civil Defense) at (513) 887-3472 or the Hamilton County Office of Emergency Management (Civil Defense) at (513) 851-7080. If you would like to hear a sample of the siren signal, please call 738-6020.

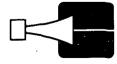


Fernald Community Relations Department Fernald Environmental Restoration Management Corporation P.O. Box 398704 Cincinnati, Ohio 45239-8704









questions below. This card will be	ght's presentations, please write your gathered prior to the question-and-every effort will be made to address print:
	Name (optional)

			FERNALD			
Program	FEI	BRUARY	MARCH		APRII	-
Community Meetings	Feb. 23	6 p.m. Exhibits 7 p.m. Meeting – The Plantation				
Community Roundtable			March 23	Risk Management		
Township Meetings	Second and Last Monday each month	Crosby Township 7:30 pm Civic Center	Second and Last Monday each month	Crosby Township 7:30 pm Civic Center	Second and Last Monday each month	Crosby Township 7:30 pm Civic Cent
	Third Tues. each month	Ross Area Merchants Assoc., 7:00 p.m. Venice Castle	Third Tues. each month	Ross Area Merchants Assoc., 7:00 p.m. Venice Castle	Third Tues. each month	Ross Area Merchant Assoc., 7:00 p.m. Venice Castle
	First and Third Thurs each month	Ross Township 7:00 p.m. Ross Fire House	First and Third Thurs each month	Ross Township 7:00 p.m. Ross Fire House	First and Third Thurs each month	Ross Township 7:00 p.m. Ross Fir House
Neighborhood Group - FRESH	February 25	7:30 p.m. Venice Presbyterian Church	Fourth Thurs each month	7:30 p.m. Venice Presbyterian Church	Fourth Thurs each month	7:30 p.m. Venice Presbyterian Churc
Public Participation	February 1	Public Comment Period Opens on DOE 5-Year Plan & Site Specific Plan	March 2	Workshop on DOE 5-Year Plan & Site Specific Plan (If desired by public)	April 16	OU5 ISA Due to U.S. EPA
			,			

mment March EE/CA moval March March	Summary fo EE/CA Due Removal Ac Public Com Period on Specific & Year Plan	eness April 1 or ction 27 mment Site Five	9 OU4 RI Due to U.S. EPA
EE/CA noval March	Summary fo EE/CA Due Removal Ac 15 Public Com Period on Specific & Year Plan 15 OU2 FS/PP	tion 27 ment Site Five	9 OU4 RI Due to CV
	Period on Specific & Year Plan	Site Five	
March		Due	
•	1	'A	
I.S. March	n 23 Winton Woo	ods H.S. April 1	9 Quebec Heights Elem. School
dio Assoc.			
kers ting			
m. March		m. April 1 aphy"	-4 National Science Teachers Assoc. Convention
•	m. March		m. March 3 Crosby Elem. April 1 "Chromotography"

FS-F-3596 (10/6/92)

			FERNA	ALD		
Program		FEBRUARY	ì	MARCH	F	APRIL
Partnership In Education Cont.	February 2	Garfield Jr. High Computers	March 9	Miamitown Elem. "Chromotography"	April 16-18	National Science &
	February 3	Miamitown Elem. Computers	March 16	Garfield Jr. High "Radiation"	April 20	Garfield Jr. High Wildlife II
	February 4	Ross Middle Computers	March 19-20	Partners for Terrific Science Miami Univ.	April 22	Ross Middle Wildlife II
	February 16	Garfield Jr. High Recycling	March 25	Ross Middle "Radiation"	April 27	Miamitown Elem. "Rockets"
	February 25	Ross Middle Recycling	March 30-31	Nat'l Science Teachers Assoc. Convention	April 28	Crosby Elem. "Rockets"
Ongoing Information/ Community Outreach	February 1	Modified FEMP Emergency & Severe Weather Warning System Activation	March 13	American Chem. Society Teacher Workshop		
	February 5	Council for Advancement of Science (US EPA)	March 18	Science Educ. Assoc. Workshop		

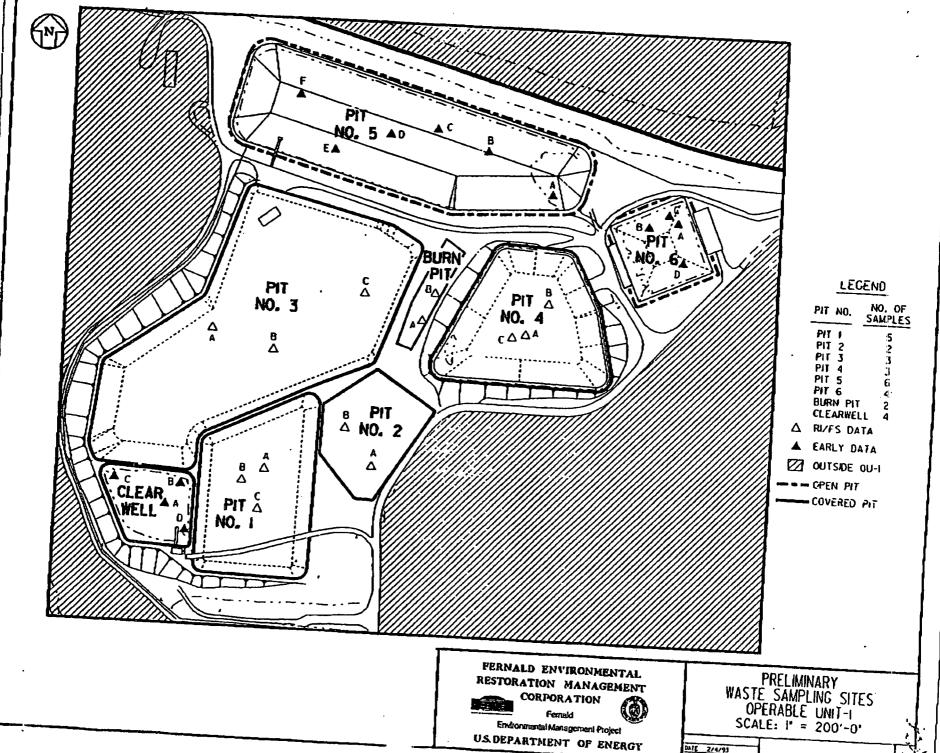
			FERNA	LD	٠		
Program	FE	BRUARY	MAR	СН	АРГ	RIL	•
Ongoing Information/ Community	February 6	Science Bowl Coaches Meeting	March 25	Ross Local Schools Meet.			25
Outreach Cont.	February 8	FERMCO Spouses Tour	March 30-31	DOE All Lab Precollege Meet.			
	Feb. 9-10	Community Leaders Workshop (Office of Tech. Develop.) is presenting)	·				
	February 10	DOE EM Quality Assurance Tour					
	Feb. 15-19	National Engineers Week		,			
	February 16	NLO Trial Begins	·				
	Feb. 18-20	Science Education Council of Ohio Convention (Fernald is presenting)					
·			·				
·							

			FERNALD	**	•
Program	F	EBRUARY	MARCH		APRIL
	February 18	Workshop on CDC Dose Reconstruction Project - Sheraton		·	5.7
Contacts: Sue Peterman Dept. of Energy	February 19	Low Level Radioactive Waste Advisory Committee			
Energy 513-738-6697 Pete Kelley FERMCO 513-738-6644	February 19	Public Hearing on Ohio Waste Repository Proposal			
	February 20	Regional Science Bowl (CTC - 8:30 am)			

PRELIMINARY WASTE SAMPLING SITES MAP

This map illustrates the sample points within OU-1 from which characterization samples have been taken. The solid triangles on the map denote sample points prior to the RI/FS study. The open triangles designate points used during the RI/FS study. Preliminary results of analysis for Uranium, Thorium and some other constituents of concern have been summarized in the table below. The average concentration for each constituent is listed along with the range of values from which the average was calculated. After validation, the results from all of the sampling efforts will be incorporated in to the RI report which is due to be submitted to the USEPA and OEPA in December 1993.

DATE Z/4/93 CHANG G. SCHRAPZHEN



	PRELIMINA WASTE SAMPLING (RI/FS DAT	RY RESULTS A)	
ANALYTE		PIT NO. 1 (3)	
Arsenic	NO. OF SAMPLES		RANGE (1)
Barium	6	1.27	0.41-1.
Mercury	6	252.22	14.5-40
1,1,1-Trichloroethane	6	0.10	0.08-0.
Total Thorium	4	0.03	0.003-0.
Total Uranium	6	0.33	0.12-0.4
		11.6	1.46-33
ANALYTE		PIT NO. 2 (4)	
	NO. OF SAMPLES	AVERAGE (2)	RANGE (2)
Arsenic	2	0.03	0.027-0.03
Barium	2	0.38	0.32-0.4
Mercury	2	0.0011	0.0002-0.001
1,1,1-Trichloroethane	3	0.10	0.05-0.1
Total Thorium	NA :	NA	N
Total Uranium	2	2,21	0.78-3.6
ANALYTE	NO, OF SAMPLES	PIT NO. 3 (4) AVERAGE (2)	
Arsenio	3 â		RANGE (2)
Barium	3	0.63	0.15~1.4
Mercury	3	0.03	0.17-0.5
1,1,1—Trichloroethane	1 1	0.001	0.0003-0.1
otal Thorium	NA 1	NA NA	0.001-0.00
otal Uranium	3	2,280	824-4,96
4444		Later 1	024-4,90
ANALYTE	NO OF CAUSI FO	PIT NO. 4 (4)	
vsenic	NO. OF SAMPLES	AVERAGE (2)	RANGE (2)
arium	2	0.0024	0.0023 - 0.002
Mercury	3	1.05	0,10-2.7
1,1-Trichloroethane	1 :	0.0002	0.0002-0.000
otal Thorium	2 .	0,11	0.005-0.2
otal Uranium	3	0.0003	0.0002-0.000
	3	203,000	40,800 - 500,00
ANALYTE		BURN PIT (3)	
	NO. OF SAMPLES	AVERAGE (1)	RANGE (1)
rsenic	4	17.4	
arium	3	196	6.90-39,
lercury	3	0.37	118-299
1,1-Trichloroethane	3	0.02	0.12-0.57 0.002-0.04
otal Thorium	4	0.05	
otal Uranium	4	2.02	0.004-0.10 0.46-4.46

NA - Not Analyzed

ND - Not Detected

1 - All Measurements in "ppm" (1 PART analyte PER MILLION parts of soil.)
2 - All Measurements in "ppm" (1 PART analyte PER MILLION parts of leachate.)
3 - Samples collected from this unit were taken from waste material in that unit.

4 - Samples collected from this unit were taken from leachate in that unit.

	PRELIMINAI WASTE SAMPLING (EARLY DAT	RESULTS	
ANALYTE	PIT NO. 5 (2)		
	NO. OF SAMPLES	AVERAGE (1)	RANGE (1)
Arsenic	3	379	179-682
Barlum	3 .	27,700	15,800 - 36,900
Mercury	3	0.75	0.39-1.20
1.1,1—Trichloroethane	3	ND	ND
Total Thorium	18	0.24	0.0062-0.72
Total Uranium	18	0.27	0.02-0.39
ANALYTE	PIT NO. 6 (2)		
	NO. OF SAMPLES	AVERAGE (1)	RANGE (1)
Arsenic	1	7.61	7.61
Barium	_ _ 1	95,22	95,22
Mercury	2	0.06	0.04-0.07
1,1,1-Trichloroethane	4	ND	ND
Total Thorium	12	0.001	0.000022-0.0045
Total Uranium	12	4.86	0.24-12.7
ANALYTE	CLEARWELL (2)		
	NO. OF SAMPLES	AVERAGE (1)	RANGE (1)
Arsenic	3	13.2	9,11-18,5
Barium	3	3,350	2,390-6,910
Mercury	3	1.89	0.42-4.38
1,1,1~Trichloroethane	3	ND	ND
Total Thorium	12	0.06	0.000011-0.62
Total Uranium	12	0,21	0.02-0.46

ND — Not Detected
1 — All Measurements in "ppm" (1 PART analyte PER MILLION parts of soil.)
2 — Samples collected from this unit were taken from waste material in that unit.